

Case Study: Exploratory Data Analysis



ABOUT US

Oxy Health Insurance is a cutting-edge tech company revolutionizing the health insurance industry. With a focus on innovation and customer-centric solutions, **Oxy Health Insurance** leverages advanced technologies to provide seamless, efficient, and personalized health insurance services. Their comprehensive platform offers a range of features, including easy online enrollment, real-time claims processing, and personalized health management tools.

Oxy Health Insurance utilizes data analytics and artificial intelligence to optimize healthcare decisions and improve outcomes for its customers. They prioritize transparency, affordability, and accessibility, aiming to simplify the complex world of health insurance and empower individuals to take control of their healthcare journeys.

With their forward-thinking approach, Oxy Health Insurance is reshaping the landscape of health insurance by integrating technology and providing unparalleled user experiences.



BUSINESS GOAL

Oxy Health Insurance is seeking to leverage predictive analytics and data-driven insights to enhance the identification and management of high-risk patients.

However, they face several challenges in collecting, analyzing, and interpreting large amounts of complex data from diverse sources such as electronic medical records, physical files, and claims data. The primary challenges include ensuring the accuracy of the collected data and determining effective interventions for high-risk groups based on the data analysis.

Additionally, **Oxy Health Insurance** aims to gain a deeper understanding of how insurance plans impact members' health outcomes and optimize their plan offerings accordingly.



DATA DICTIONARY

1. **ID:** unique identifier assigned to each insured individual.
2. **Name:** name of the insured individual.
3. **Age:** insured individual's age at the time of obtaining the health insurance policy.
4. **Sex:** indicates the gender of the insured person, whether they are male or female.
5. **BMI:** BMI stands for Body Mass Index and is a numerical value derived from an individual's height and weight.
6. **Children:** the number of dependent children covered under the health insurance policy.
7. **Smoker:** indicates whether the insured individual is a smoker or non-smoker. (Yes/No).
8. **Region:** refers to the geographical area or location where the insured individual resides.
9. **Charges:** relates to the costs associated with the health insurance policy.





**Thanks for
viewing.**